

**CURRENTLY PENDING CLAIMS**

1. (Currently amended) A wafer having a surface, the wafer comprising:  
a plurality of regions of dielectric and polysilicon semiconductor exposed at the surface of the wafer after chemical mechanical planarization, the polysilicon semiconductor regions formed over a substrate, wherein the polysilicon semiconductor regions have a total surface area that is less than or equal to a first fraction of a total surface area of the wafer and each of the polysilicon semiconductor regions have a shortest surface dimension that is less than or equal to a first width, the first fraction and the first width ensuring that the surface of the wafer can attract enough water to wet sufficiently allowing removal of residual particles therefrom,  
and wherein the surface is planarized.
2. (Original) The wafer of claim 1 wherein the first fraction equals 60%.
3. (Original) The wafer of claim 1 wherein the first fraction equals 50%.
4. (Original) The wafer of claim 1 wherein the first width equals 2.5 millimeters.
5. (Original) The wafer of claim 1 wherein the first width equals 500 microns.
6. (Cancelled)
7. (Original) The wafer of claim 1 wherein the dielectric regions comprise silicon dioxide.
8. (Original) The wafer of claim 1 wherein the regions of dielectric and semiconductor alternate along the surface of the wafer.

9. (Original) The wafer of claim 1 wherein the regions of dielectric are elongated strips.
10. (Original) The wafer of claim 1 wherein the regions of semiconductor are elongated strips.
11. (Original) The wafer of claim 1 wherein the regions of dielectric are rectangular.
12. (Original) The wafer of claim 1 wherein the regions of semiconductor are rectangular.
13. (Original) The wafer of claim 1 wherein the regions of semiconductor are hexagonal.
14. (Original) The wafer of claim 1 wherein the regions of semiconductor are interspersed within a sea of dielectric.
- 15-29. (Cancelled)
30. (Currently amended) A wafer having a surface, the wafer comprising:
  - means for attracting water to the surface of the wafer; and
  - means for repelling water from the surface of the wafer comprising polysilicon regions above a substrate that have a combined surface area that is less than or equal to a first fraction of a surface area of the wafer,
  - wherein each of the polysilicon regions has a shortest surface dimension that is less than or equal to a first width, and the first fraction and the first width ensure that the surface of the wafer can attract enough water to wet sufficiently allowing removal of residual particles therefrom,
  - and wherein the surface is planarized.
31. (Original) The wafer of claim 30 wherein the first fraction equals 60%.
32. (Original) The wafer of claim 30 wherein the first fraction equals 50%.

33. (Original) The wafer of claim 30 wherein the first width equals 2.5 millimeters.
34. (Original) The wafer of claim 30 wherein the first width equals 500 microns.
35. (Cancelled)
36. (Original) The wafer of claim 30 wherein the means for attracting water comprises silicon dioxide.
37. (Original) The wafer of claim 30 wherein the means for attracting water comprises elongated strips of dielectric.
38. (Original) The wafer of claim 30 wherein the means for attracting water comprises of rectangular regions of dielectric.
39. (Original) The wafer of claim 30 wherein the means for attracting water comprises dielectric regions, the means for repelling water comprises semiconductor regions, and wherein the dielectric regions and semiconductor regions alternate along the surface of the wafer.
40. (Original) The wafer of claim 30 wherein the means for repelling water comprises elongated strips of semiconductor.
41. (Original) The wafer of claim 30 wherein the means for repelling water comprises rectangular regions of semiconductor.
42. (Original) The wafer of claim 30 wherein the means for repelling water comprises hexagonal regions of semiconductor.

43. (Original) The wafer of claim 30 wherein the means for attracting water comprises dielectric, the means for repelling water comprises semiconductor regions, and the semiconductor regions are interspersed within a sea of dielectric.
44. (Currently amended) A wafer having a surface, the wafer comprising:  
a plurality of regions of polysilicon hydrophobic material and hydrophilic material exposed at the surface of the wafer after chemical mechanical planarization, wherein the regions of hydrophobic material are deposited over a substrate and have a total surface area that is less than or equal to a first fraction of a total surface area of the wafer, and each of the regions of hydrophobic material have a shortest surface dimension that is less than or equal to a first width, the first fraction and the first width ensuring that the surface of the wafer can attract enough water to wet sufficiently allowing removal of residual particles therefrom, wherein the surface is planarized.
45. (Original) The wafer of claim 44 wherein the first fraction equals 60%.
46. (Original) The wafer of claim 44 wherein the first fraction equals 50%.
47. (Original) The wafer of claim 44 wherein the first width equals 2.5 millimeters.
48. (Original) The wafer of claim 44 wherein the first width equals 500 microns.
49. (Cancelled)
50. (Original) The wafer of claim 44 wherein the hydrophilic material comprises silicon dioxide.
51. (Original) The wafer of claim 44 wherein the regions of hydrophobic material and hydrophilic material alternate along the surface of the wafer.

52. (Original) The wafer of claim 44 wherein the regions of hydrophilic material and hydrophobic material are elongated strips.
53. (Original) The wafer of claim 44 wherein the regions of hydrophilic material are rectangular.
54. (Original) The wafer of claim 44 wherein the regions of hydrophobic material are rectangular.
55. (Original) The wafer of claim 44 wherein the regions of hydrophobic material are hexagonal.
56. (Original) The wafer of claim 44 wherein the regions of hydrophobic material are interspersed within a sea of hydrophilic material.
57. (Previously added) The wafer of claim 1 wherein the polysilicon semiconductor regions comprise doped polysilicon.
58. (Previously amended) The wafer of claim 57 wherein the doped polysilicon is doped by depositing a dopant along with the polysilicon.
59. (Previously amended) The wafer of claim 30 wherein the means for repelling water from the surface comprise doped polysilicon.
60. (Previously amended) The wafer of claim 59 wherein the doped polysilicon is doped by depositing a dopant along with the polysilicon.
61. (Previously amended) The wafer of claim 44 wherein the polysilicon hydrophobic material comprises doped polysilicon.

62. (Previously amended) The wafer of claim 61 wherein the doped polysilicon is doped by depositing a dopant along with the polysilicon.

**CLAIM AMENDMENTS**

Claim 1 has been amended to recite a wafer having a surface, the wafer comprising a plurality of regions of dielectric and polysilicon semiconductor exposed at the surface of the wafer after chemical mechanical planarization, the polysilicon semiconductor regions formed over a substrate, wherein the polysilicon semiconductor regions have a total surface area that is less than or equal to a first fraction of a total surface area of the wafer and each of the polysilicon semiconductor regions have a shortest surface dimension that is less than or equal to a first width, the first fraction and the first width ensuring that the surface of the wafer can attract enough water to wet sufficiently allowing removal of residual particles therefrom, and wherein the surface is planarized.

Claim 30 has been amended to recite a wafer having a surface, the wafer comprising means for attracting water to the surface of the wafer; and means for repelling water from the surface of the wafer comprising polysilicon regions above a substrate that have a combined surface area that is less than or equal to a first fraction of a surface area of the wafer, wherein each of the polysilicon regions has a shortest surface dimension that is less than or equal to a first width, and the first fraction and the first width ensure that the surface of the wafer can attract enough water to wet sufficiently allowing removal of residual particles therefrom, and wherein the surface is planarized.

Claim 44 has been amended to recite a wafer having a surface, the wafer comprising a plurality of regions of polysilicon hydrophobic material and hydrophilic material exposed at the surface of the wafer after chemical mechanical planarization, wherein the regions of hydrophobic material are deposited over a substrate and have a total surface area that is less than or equal to a first fraction of a total surface area of the wafer, and each of the regions of hydrophobic material have a shortest surface dimension that is less than or equal to a first width, the first fraction and the first width ensuring that the surface of the wafer can attract enough water to wet sufficiently allowing removal of residual particles therefrom, wherein the surface is planarized.

The amendments are of two types. Claims 1 and 30 were amended by adding the word "polysilicon" to address the Examiner's objections. All three of these claims are amended to add the limitation that the surface is planarized. Support for this

planarization can be found in the specification at paragraphs [0020], [0031], and [0036] ,  
*inter alia*.